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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Gabriel Petta

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EXAMINER

STRIMBU, GREGORY J

ART UNIT

PAPER NUMBER

3634

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/811,154	PETTA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Gregory J. Strimbu	3634	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 6/16/08 + 7/7/08.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-17 and 21-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-17 and 21-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davies (US 5280686) in view of Kownacki et al. (US 6749797). Davies discloses a frame assembly comprising:

a) a unitary master frame 10 including upper and lower horizontal master frame members 15 and 16, and opposed first 14 and second 13 vertical jamb members extending between the upper and lower horizontal master frame members; and

b) a unitary sash frame 12 slidably mounted within the master frame, the sash frame including upper and lower horizontal sash frame members 46 and 47, and a pair of opposed side members 44 and 45 extending vertically between the upper and lower horizontal sash frame members,

a mullion 33 defined by a vertical member extending contiguously from, and vertically between the upper 15 and lower 16 horizontal master frame members, the mullion having a vent side (not numbered, but shown on the right hand side of the mullion in figure 1) directed towards the first vertical jamb member 14 and a fixed side (not numbered, but shown on the left hand side of the mullion in figure 1) directed towards the second vertical jamb member 13,

the mullion having glazing support details 39, screen support details 63, projections 23 and channels 54, 55, 56, a first sash frame interlacing configuration (not numbered, but comprising the portion of the master frame 10 which is removed for the installation of element 78), a first cavity (not numbered, but shown in figure 2 above the sliding sash frame 12 where the reference character 77 is located) which traverses the mullion as shown in figure 6 and is open towards the lower horizontal master frame member as shown in figure 4, a shoulder defined by the cut 78B as shown in figure 6, a second sash frame interlacing configuration (not shown but comprising the portion of the guide 24 which is cut out for the insertion of element 78 when the master frame is inverted), a glider element 74. Davies is silent concerning a one-piece unitary master and sash frames.

However, Kownacki et al. discloses a method of making a master frame and a sash frame of a window comprising integrally molding the master frame 30 and the sash frame 50.

It would have been obvious to one of ordinary skill in the art to make the frames of Davies by using the integrally molding method steps, taught by Kownacki et al., to avoid water and air penetrating the corner joints and to increase the torsional rigidity of the frames.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Davies in view of Arbetter (US 5189841). Davies discloses a frame assembly, the frame assembly comprising:

a) a unitary master frame 10 including upper 15 and lower 16 horizontal master frame members, and opposed first 14 and second 13 vertical jamb members extending between the upper and lower horizontal master frame members, and a mullion 33 defined by a vertical member extending contiguously from, and vertically between, the upper and lower horizontal master frame members, the mullion having a vent side (not numbered, but shown on the right hand side of the mullion in figure 1) directed towards the first vertical jamb member 14 and a fixed side (not numbered, but shown in figure 1 on the left hand side of the mullion) directed towards the second vertical jamb member 13;

b) a unitary sash frame 12 slidably mounted within the master frame, the sash frame including upper 46 and lower 47 horizontal sash frame members, and a pair of opposed side members 44 and 45 extending vertically between the upper and lower horizontal sash frame members, the sash frame being slidable between open and closed positions within the master frame; and

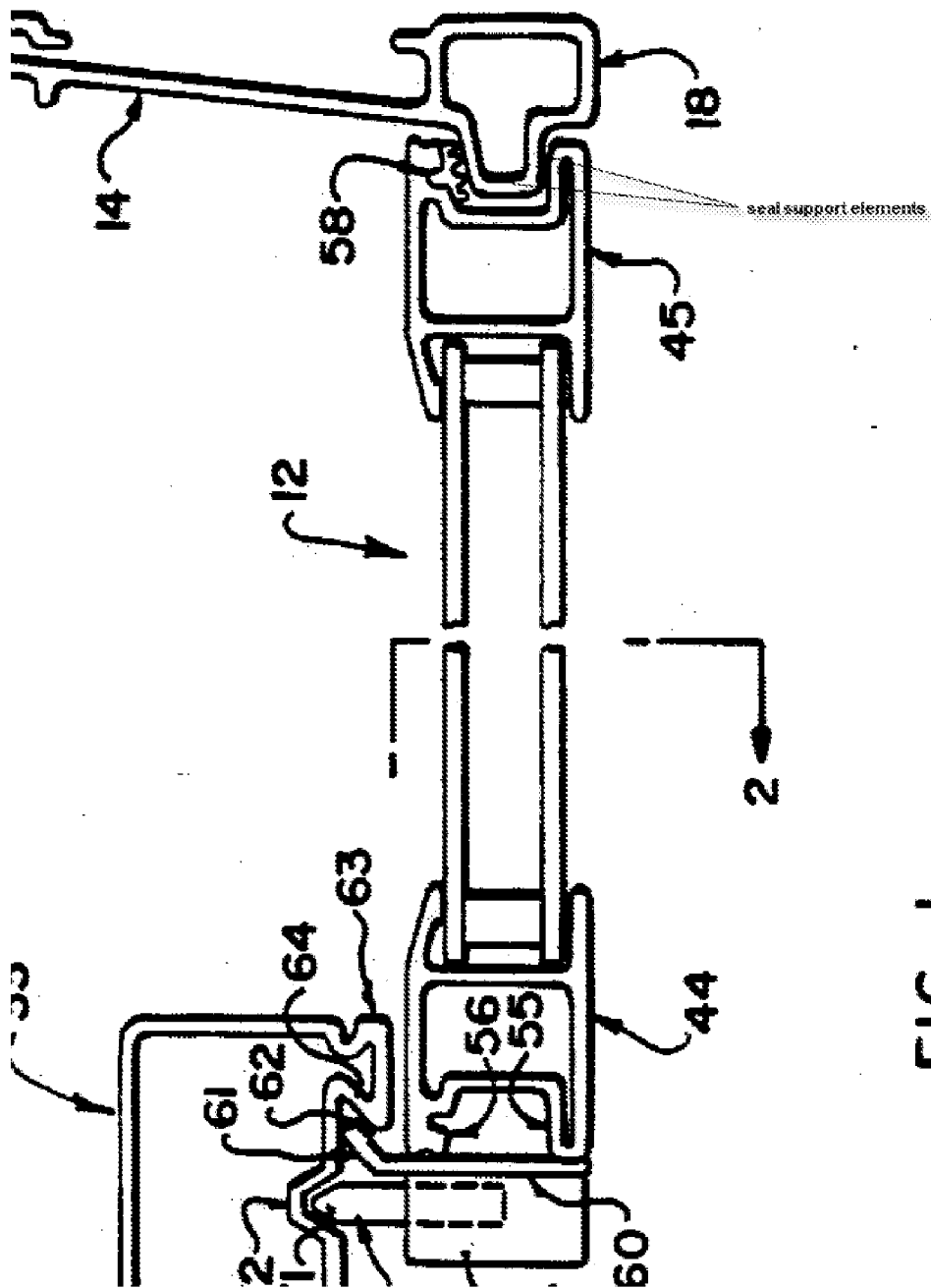
c) seal support elements (labeled below) on the master frame for securing seals to the master frame, the seals adapted to engage the sash frame for inhibiting penetration of fluid from an exterior environment to an interior environment when the sash frame is in the closed position.

Davies is silent concerning integrally molding the master frame and the sash frame.

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However, Arbetter discloses a method of making a master frame 60 and a sash frame 62 of a window comprising integrally molding the master frame and the sash frame.

It would have been obvious to one of ordinary skill in the art to manufacture the frame assembly of Davies by using the integrally molding method steps, taught by Arbetter, to avoid water and air penetrating the corner joints and to increase the torsional rigidity of the frames.



Claims 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davies in view of Kownacki et al. as applied to claims 21-23 above, and further in view

of Japanese Patent Publication 2002-227551. Davies, as modified above, is silent concerning, *inter alia*, a fluid penetration flow path.

However, Japanese Patent Publication 2002-227551 discloses a frame assembly comprising:

(a) a unitary master frame including upper and lower horizontal master frame members 10 and 40, and opposed first 20 and second 30 vertical jamb members extending between the upper and lower horizontal master frame members, and a mullion defined by a vertical member extending contiguously from and vertically between the upper and lower horizontal master frame members, the mullion having a vent side directed towards the first vertical jamb member and a fixed side directed towards the second vertical jamb member;

b) a unitary sash frame 50 slidably mounted within the master frame and movable between open and closed positions, the sash frame including upper and lower horizontal sash frame members 51 and 55, and a pair of opposed side members 52 and 53 extending vertically between the upper and lower horizontal sash frame members;

(c) at least one fluid penetration flow path (not numbered, but shown between the rail 53 and the mullion 63 as shown in figures 2 and 6) extending between the external and internal environments through the frame assembly when the sash frame is in the closed position; and

(d) a weather buffering mechanism provided in the at least one fluid penetration flow path and adapted to inhibit the penetration of fluid from the exterior environment to the interior environment along the fluid penetration flow path, the weather buffering



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mechanism including a weather buffering chamber (not numbered, but shown in figure 6 between the rail 53 and the mullion 63) disposed in the at least one fluid penetration flow path and extending between an exterior seal (not numbered, but shown on the right hand side of figure 6 as the angled surfaces of the rail 53 and the mullion) disposed upstream of the buffering chamber and an interior seal 66 disposed downstream of the buffering chamber;

an exterior drain 15;

wherein the weather buffering mechanism further comprises an air reservoir (not numbered, but shown in figure 6 as the volume of air defined by the U-shaped portion of the mullion 63) substantially separated from the buffering chamber by a cover member 71, the cover member comprising apertures (not numbered, but shown in figure 6 between each element 71 of the cover member 71) therethrough, the air reservoir in fluid communication with the buffering chamber through the apertures to provide a source of generally dry air to be drawn into the buffering chamber.

It would have been obvious to one of ordinary skill in the art to provide the master frame of Davies, as modified above, with the fluid management system, as taught by Japanese Patent Publication 2002-227551, to prevent water from penetrating between the mullion and the sash frame to the inside of the frame assembly.

### ***Response to Arguments***

Applicant's arguments filed June 16, 2008 have been fully considered but they are not persuasive.

The applicant's comments concerning the rejections based on 35 USC 102(b) are moot in view of the new grounds of rejection.

The applicant's comments regarding one of ordinary skill in the art not being motivated to manufacture the frame assembly of Davies by integrally molding, as taught by Kownacki et al., are not persuasive. The applicant's statement that the ratio of resin to hollowed sections of the frame assembly of Davies would be far too low if manufactured by integrally molding the frame assembly is mere supposition and not persuasive. Even if the ratio were too low, one of ordinary skill in the art could easily remedy this "problem" by increasing the amount of resin. The applicant's comments concerning the voids where 23 and 34 points in Fig. 4 and the voids where 77 and 37 are in Fig. 4 are not understood because reference characters 23, 34, 77 and 37 do not appear in figure 4 of either Davies or Kownacki et al. The applicant's statement that one of ordinary skill in the art would not know how to blow gas into the mold such that two hollowed out voids could be provided in a side by side relationship is not persuasive. The voids of Davies could be created via a blow molding process since none of the voids are close enough to interfere with one another during the blow molding process. The applicant's comment how the problem of ejecting the frame of Davies from an injection mold could be overcome is not persuasive since the frames of Davies could be molded in a shape that could be easily ejected from the molds and then milled/shaped to reach the final desired configuration. The applicant's comments concerning claim 7 are not persuasive since the frame 10 could be integrally molded and then the portion of the frame between 78A and 78B (figure 6) could be removed so that the element 78 can

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be installed. Such a modification of the frame 10 would not prevent the frame 10 from being integrally molded. Note that the applicant has used the open ended language "comprising" which does not prevent subsequent steps following the step of integrally molding the frames. The applicant's comments concerning Japanese Patent Publication 2002-227551 as previously applied to claim 17 are moot in view of the new grounds of rejection. The applicant's comments concerning the air reservoir being substantially separated from the buffering chamber by the cover member 71 are not persuasive since the presence of the cover member 71 substantially separates the buffering chamber from the cover member since the cover member 71 partially defines the air reservoir.

### ***Conclusion***

#### **THIS ACTION IS NOT MADE FINAL.**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory J. Strimbu whose telephone number is 571-272-6836. The examiner can normally be reached on Monday through Friday 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Katherine Mitchell can be reached on 571-272-7069. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gregory J. Strimbu/  
Primary Examiner, Art Unit 3634